

# KE-4000 E

CASSETTE CAR STEREO  
WITH AM/FM ELECTRONIC TUNER

# KE-4300 E

CASSETTE CAR STEREO  
WITH LW/MW/FM ELECTRONIC TUNER



Subject: For Cassette Mechanism, refer to the Service Manual of  
unit number CX-121SM.

## SPECIFICATIONS

### General

Power source	DC14.4V (10.8~15.6V allowable)
Grounding system	Negative type
Max. current consumption	1.2A
Power output (max.)	6.5W+6.5W (continuous) 4.5W+4.5W
Load impedance	4Ω (2~8Ω allowable)
Dimensions (W×H×D)	180×50×150 mm
Nose size (W×H×D)	105×42×16 mm
Shaft interval	130 mm
Weight	1.8 kg

### Tape player

Tape	Compact cassette tape (C-30~C-90)
Tape speed	4.76 cm/sec. (+0.19 cm/sec. -0.05 cm/sec.)
Fast forward time	Within 100 sec. for C-60
Rewind time	Within 100 sec. for C-60
Wow & flutter	No more than 0.2% (WRMS)
Frequency response	50~12,000 Hz (±3 dB)
Stereo separation	More than 40 dB
Signal-to-noise ratio	More than 45 dB

### FM tuner

Frequency range	88~108 MHz
Usable sensitivity	12 dBf (1.1 μV/75Ω)
50 dB quieting sensitivity	17 dBf (1.9 μV/75Ω, mono)
Signal-to-noise ratio	60 dB
Selectivity	70 dB (±400 kHz)
Distortion	0.5% (at 65 dBf, 1 kHz, stereo)
Frequency response	50~12,000 Hz (±3 dB)
Stereo separation	35 dB (at 65 dBf, 1 kHz)

### AM (MW) tuner

Frequency range	525~1,605 kHz
Usable sensitivity	30 μV
Selectivity	30 dB (±9 kHz)

### LW tuner (KE-4300)

Frequency range	150~280 kHz
Usable sensitivity	70 μV
Selectivity	35 dB (±9 kHz)

### Note:

Specifications and the design are subject to possible modification without notice due to improvements.

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## CONTENTS

1. PARTS LOCATION .....	1
2. CIRCUIT DESCRIPTION .....	1
3. ADJUSTMENT .....	
3.1 FM IF Adjustment .....	3
3.2 FM MPX Adjustment .....	3
3.3 Auto Level Adjustment .....	3
3.4 FM Tracking Adjustment .....	4
3.5 AM (MW) IF Adjustment .....	5
3.6 AM (MW) Tracking Adjustment .....	6
3.7 LW Tracking Adjustment .....	7
4. SCHEMATIC CIRCUIT DIAGRAM (KE-4000) .....	12
5. CONNECTION DIAGRAM (KE-4000) .....	15
6. SCHEMATIC CIRCUIT DIAGRAM (KE-4300) .....	18
7. CONNECTION DIAGRAM (KE-4300) .....	21
8. CABINET EXPLODED VIEW .....	24
9. CHASSIS EXPLODED VIEW .....	25
10. PACKING METHOD .....	27
11. PARTS LIST .....	28

## 1. PARTS LOCATION

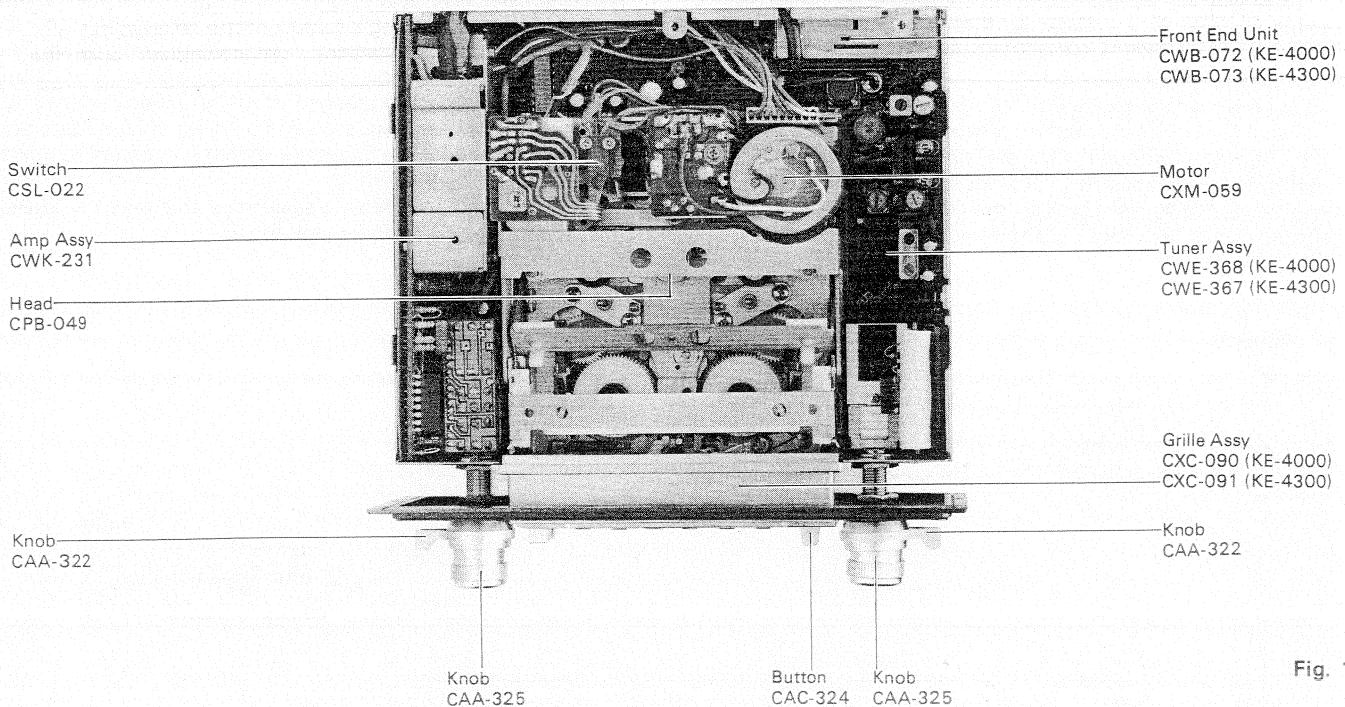


Fig. 1

## 2. CIRCUIT DESCRIPTION

### ● Level Diagram

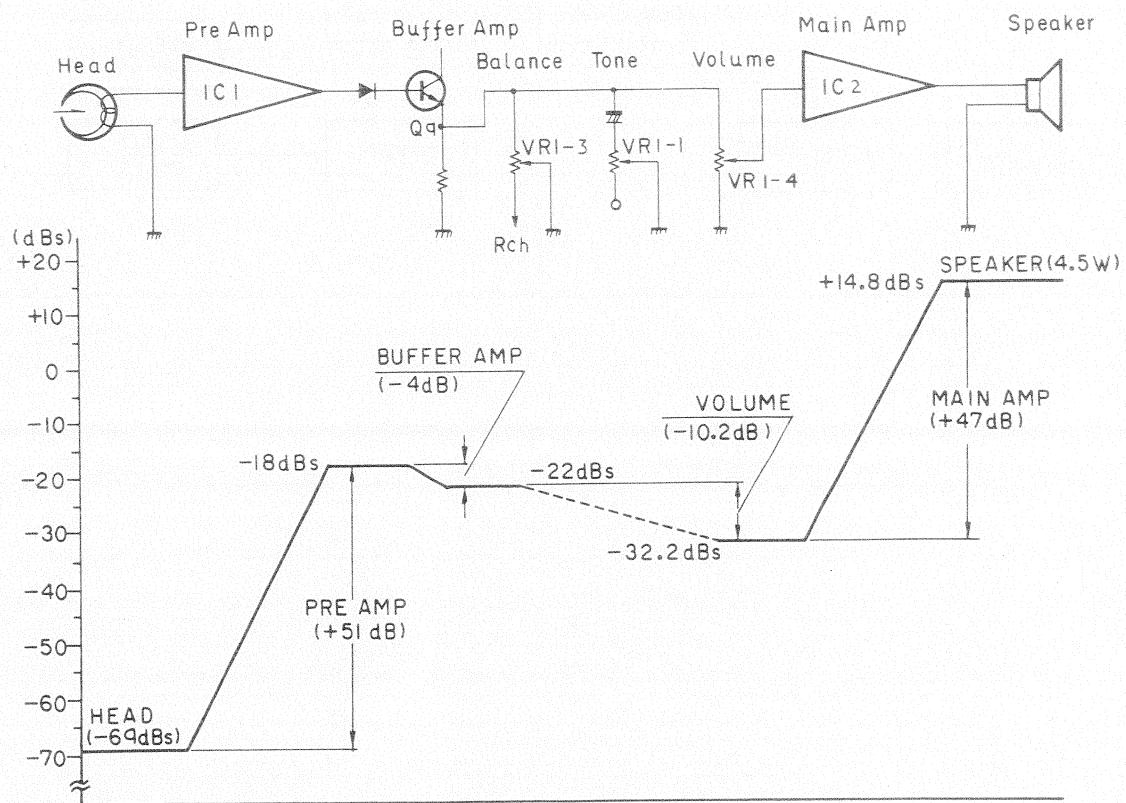


Fig. 2

## CIRCUIT DESCRIPTION

### ● Block Diagram

This digitally controlled circuit with frequency presetting systems consists of a voltage synthesizing circuit incorporating varactor diodes (varactors), and is designed to generate varactor control voltage, memorize tuning frequency, and digitally indicate the tuned frequency.

Turn the tuning knob left or right to feed tuning pulses to LSI (PD1002) so that the contents of the internal counter may be either reduced or increased. The output of the counter is converted through the D/A converter into DC voltage which is applied to the varactor. The tuning frequ-

ency rises or falls depending on the direction the tuning knob is turned, permitting selection of the desired stations.

To preset the tuned station, simultaneously push the station selector button and the memory button. The frequency of the selected station is thereby stored in the RAM (Random Access Memory), and pushing only the selector button will recall the frequency stored in memory to again tune the preset station.

The frequency tuned is displayed by an array of 32 LEDs. This readout is completely electronic.

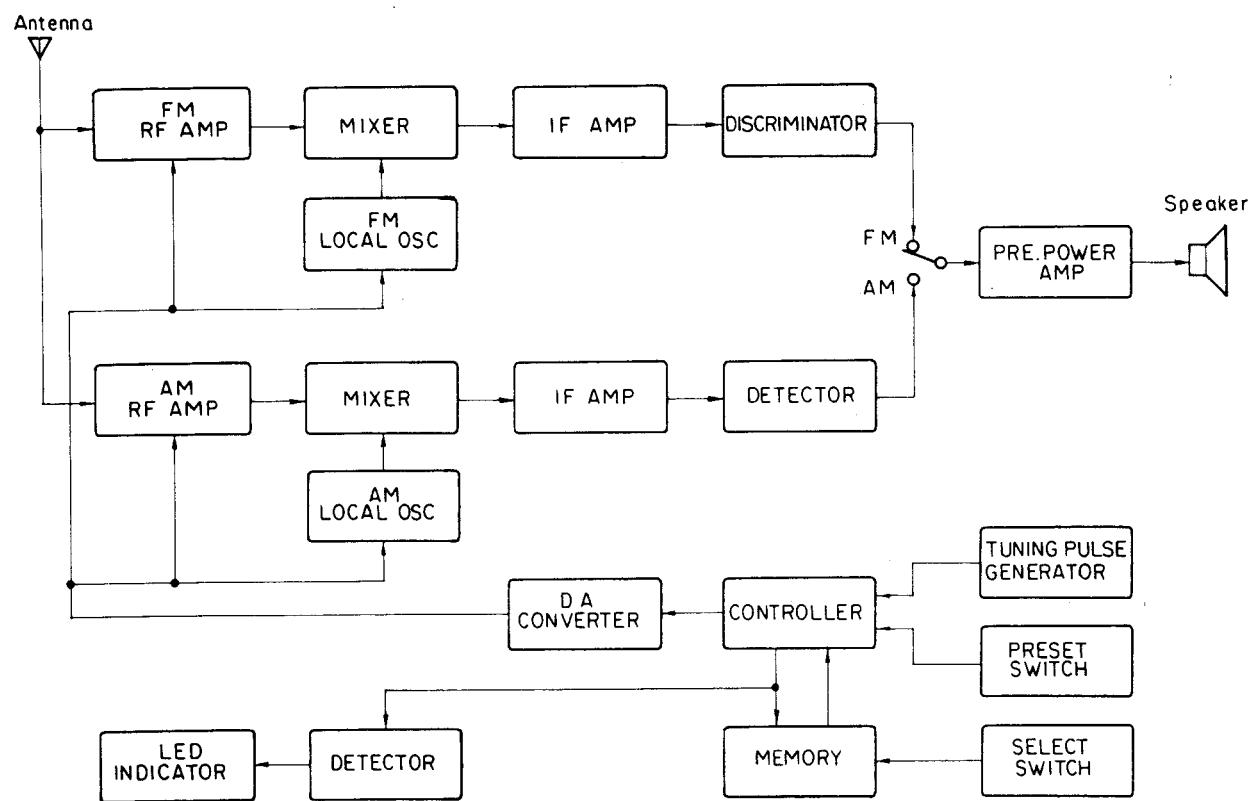


Fig. 3

### 3. ADJUSTMENT

#### 3.1 FM IF ADJUSTMENT

- Connection Diagram

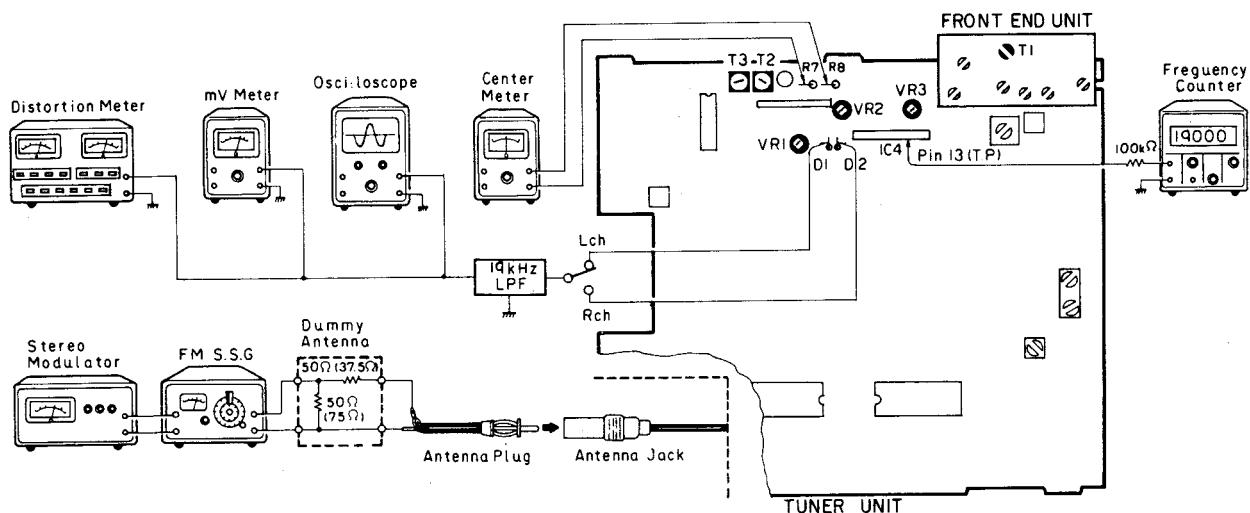


Fig. 4

- To Adjust

1. Add input signal of zero from SSG and adjust T2 so that the pointer of center meter (use one graduated for over 200  $\mu$ A) will come to the center.
2. Set SSG to 100% modulation at 400 Hz, and apply an output signal of 98 MHz, 60 dB.
3. Adjust T3 so that separated signals will have but a minimum distortion.
4. Add output signal of 98 MHz 60 dB from SSG, multisignal of modulated frequency 1 kHz of stereo modulator and tune to 98 MHz on the dial (the pointer of the center meter is at the center).
5. Adjust T1 (front end unit) so that separated signal will be minimal in its distortion factor.

#### 3.2 FM MPX ADJUSTMENT

- Connection Diagram (Shown in Fig. 4)

- To Adjust

1. Select the band switch to AUTO position.
2. Obtain non-modulation signal by setting SSG output at 60 dB ( $\mu$ V) 98 MHz. Adjust VR3 so that the frequency counter indicates 19 kHz  $\pm$ 30 Hz.
3. Obtain stereo modulation signal by setting SSG output at 60 dB ( $\mu$ V). Adjust VR2 to secure maximum separation.

#### 3.3 AUTO LEVEL ADJUSTMENT

- Connection Diagram (Shown in Fig. 4)

- To Adjust

1. Select the band switch to AUTO position.
2. Set SSG at 98 MHz and tune using the tuning knob.
3. Set SSG to an output level of 20 dB ( $\mu$ V), and adjust VR1 to a separation of 5 dB (between the right and left channels).

## ADJUSTMENT

### 3.4 FM TRACKING ADJUSTMENT

- Connection Diagram

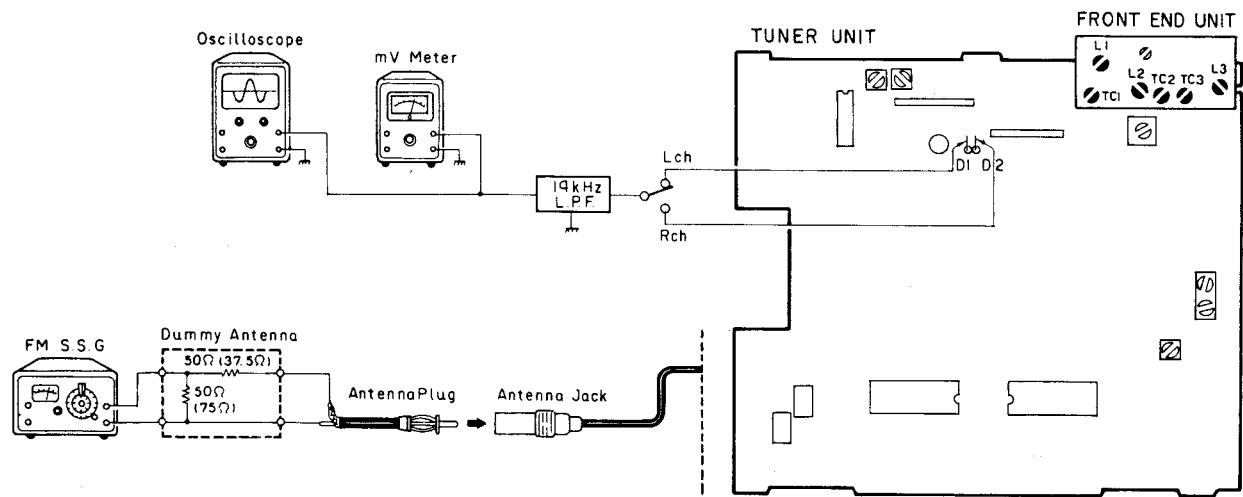


Fig. 5

- To Adjust

In case of KE-4000

SSG Frequency	Pointer Position	Adjustment point	Note
1. 87.0 MHz (400 Hz, 100% modulation), output level 10 dB ( $\mu$ V)	Minimum	L3	87.0 MHz can be received
2. 109 MHz (400 Hz, 100% modulation), output level 10 dB ( $\mu$ V)	Maximum	TC3	109 MHz can be received
3. Repeat items (1) and (2) alternately so that broadcast can be received at the frequency between 87.0 MHz and 109 MHz.			
4. 90 MHz (400 Hz, 100% modulation), output level 5 dB ( $\mu$ V)	Tuned position	L1, L2	Maximum output
5. 106 MHz (400 Hz, 100% modulation), output level 5 dB ( $\mu$ V)	Tuned position	TC1, TC2	Maximum output
6. Repeat items (4) and (5) alternately so that the mV meter indicates maximum output.			

## ADJUSTMENT

In case of KE-4300

SSG Frequency	Pointer Position	Adjustment point	Note
1. 87.0 MHz (400 Hz, 100% modulation), output level 10 dB ( $\mu$ V)	Minimum	L3	87.0 MHz can be received
2. 105 MHz (400 Hz, 100% modulation), output level 10 dB ( $\mu$ V)	Maximum	TC3	105 MHz can be received
3. Repeat items (1) and (2) alternately so that broadcast can be received at the frequency between 87.0 MHz and 105 MHz.			
4. 90 MHz (400 Hz, 100% modulation), output level 5 dB ( $\mu$ V)	Tuned position	L1, L2	Maximum output
5. 104 MHz (400 Hz, 100% modulation), output level 5 dB ( $\mu$ V)	Tuned position	TC1, TC2	Maximum output
6. Repeat items (4) and (5) alternately so that the mV meter indicates maximum output.			

### 3.5 AM (MW) IF ADJUSTMENT

#### ● Connection Diagram

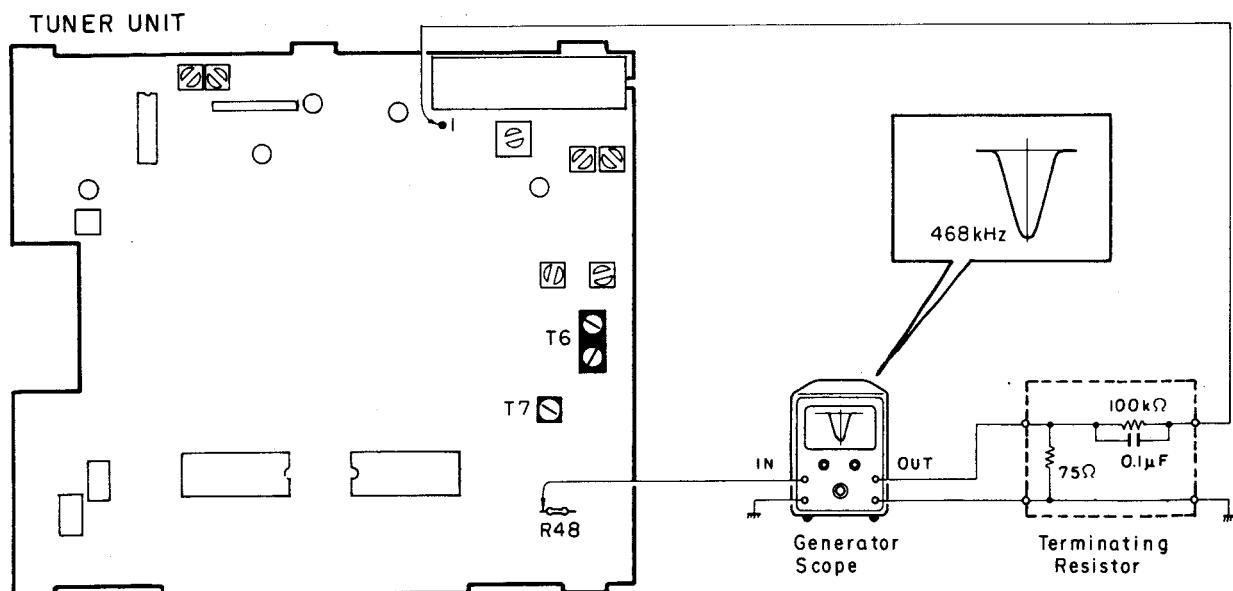


Fig. 6

#### ● To Adjust

1. Set Generator Scope as Follows:
  - Frequency centering on sweep..... 468 kHz
  - Input level..... 0.3Vp-p/cm
  - Output level..... 3 mV~10 mV
2. Turn the cores of T6 and T7 and adjust so that U-curve will be at maximum amplitude and best symmetry.

## ADJUSTMENT

### 3.6 AM (MW) TRACKING ADJUSTMENT

#### ● Connection Diagram

In case of KE-4000

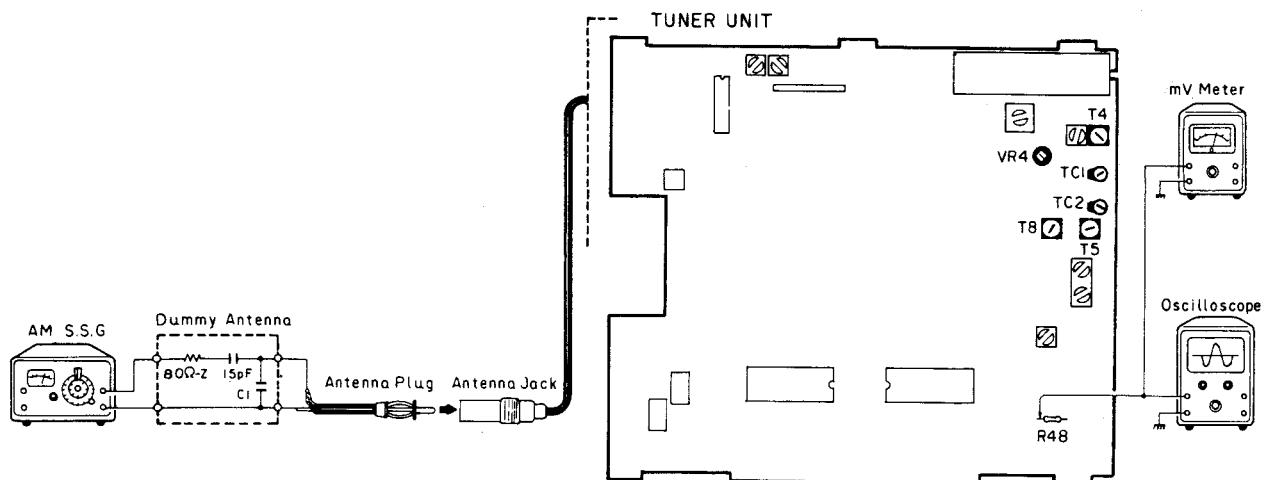


Fig. 7

In case of KE-4300

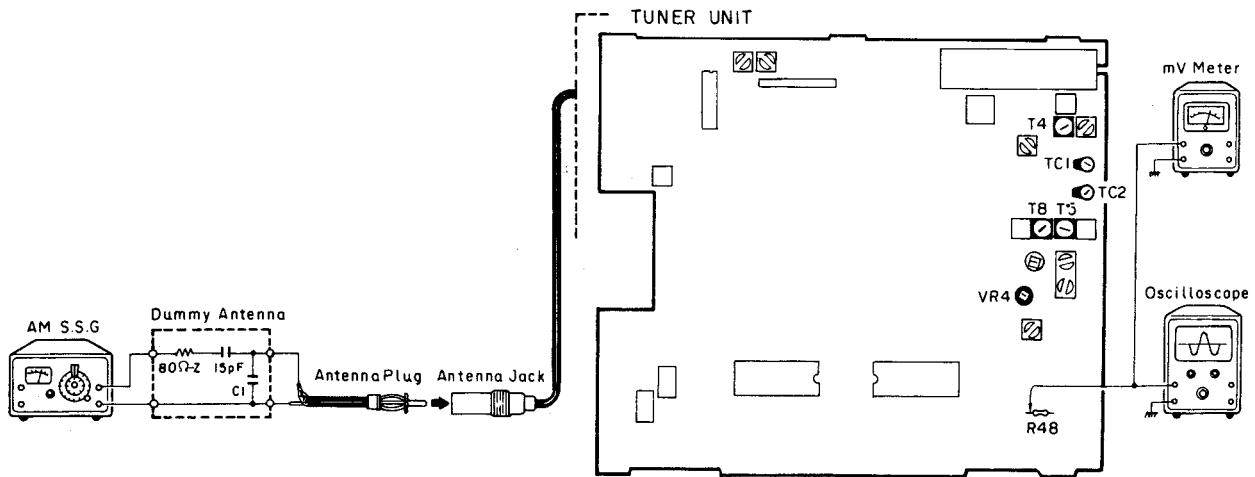


Fig. 8

#### NOTICE:

Select C1 so that total capacity of 80 pF is attained from the direction of the receiver jack.

Z: Output impedance of the SSG.

## ADJUSTMENT

### ● To Adjust

SSG Frequency	Pointer Position	Adjustment Point	Note
1. 515 kHz (400 Hz, 30% modulation), output level 30 dB ( $\mu$ V)	Minimum	VR4	515 kHz can be received
2. 1,630 kHz (400 Hz, 30% modulation), output level 30 dB ( $\mu$ V)	Maximum	T8	1,630 kHz can be received
3. Repeat (1) and (2) alternately and adjust so that broadcast can be received at the frequency between 515 kHz and 1,630 kHz.			
4. 600 kHz (400 Hz, 30% modulation), output level 30 dB ( $\mu$ V)	Tune to 600 kHz	T4, T5	mV Meter at maximum
5. 1,400 kHz (400 Hz, 30% modulation), output level 30 dB ( $\mu$ V)	Tune to 1,400 kHz	TC1, TC2	mV Meter at maximum

## 3.7 LW TRACKING ADJUSTMENT (KE-4300)

### ● Connection Diagram

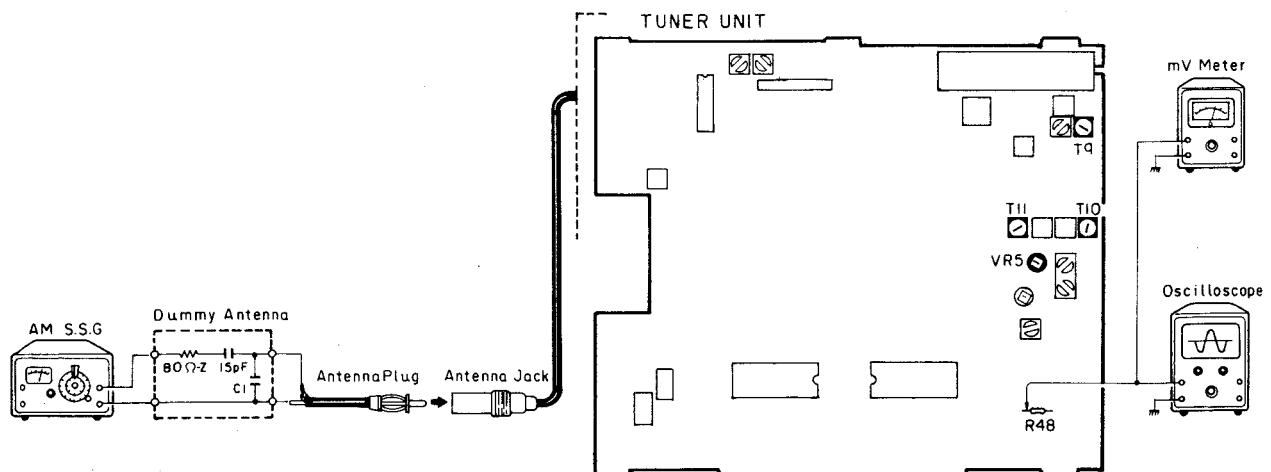


Fig. 9

### NOTICE:

Select C1 so that total capacity of 80 pF is attained from the direction of receiver jack.

Z: Output impedance of the S.S.G.

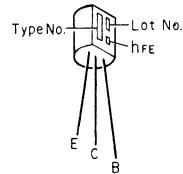
## ADJUSTMENT

### ● To Adjust

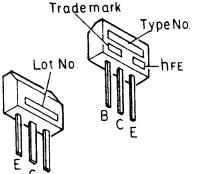
SSG Frequency	Pointer Position	Adjustment Point	Note
1. 145 kHz (400 Hz, 30% modulation), output level 40 dB ( $\mu$ V)	Minimum	VR5	145 kHz can be received
2. 295 kHz (400 Hz, 30% modulation), output level 40 dB ( $\mu$ V)	Maximum	T11	295 kHz can be received
3. Repeat (1) and (2) alternately and adjust so that broadcast can be received at the frequency between 145 kHz and 295 kHz.			
4. 215 kHz (400 Hz, 30% modulation), output level 40 dB ( $\mu$ V)	Tune to 215 kHz	T9, T10	mV Meter at maximum

● IC's and Transistors

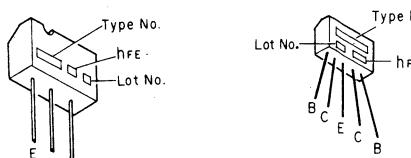
2SC1674  
2SC1675  
2SA952



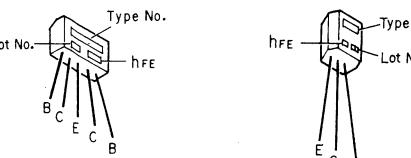
2SC1213A  
2SC1214  
2SC535  
2SC460



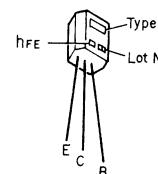
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2SC2021LN  
2SA786



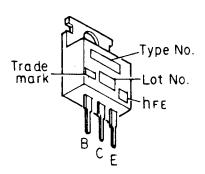
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2SA798



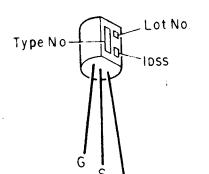
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2SC2458



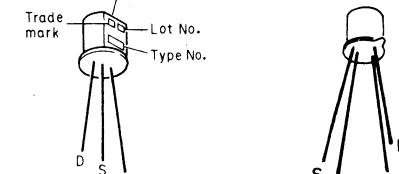
2SB566



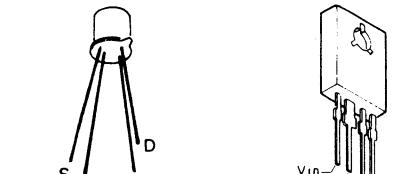
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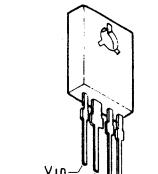
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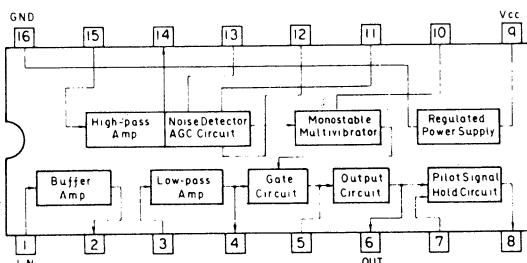
SD306PA



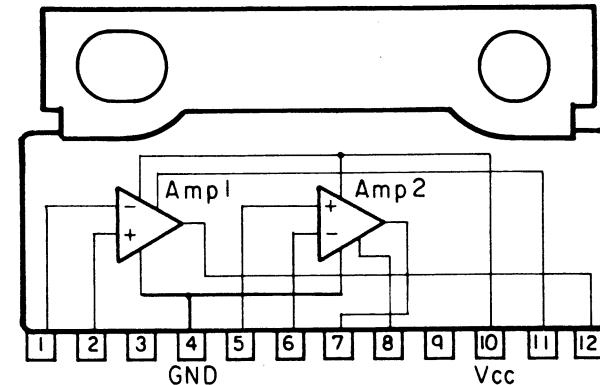
LVC509



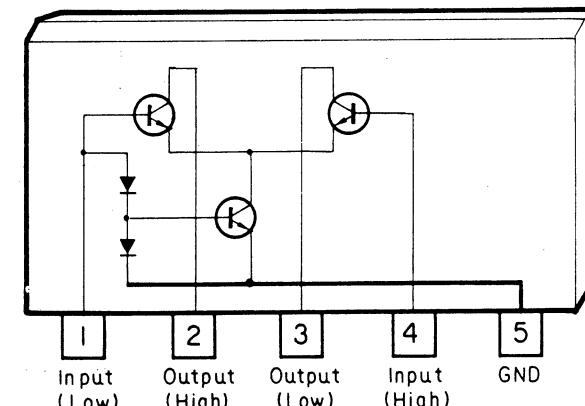
LA2101



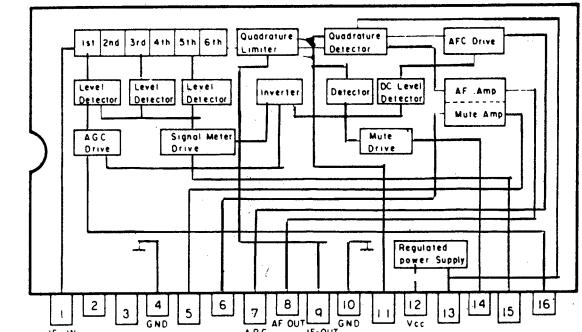
HA1398



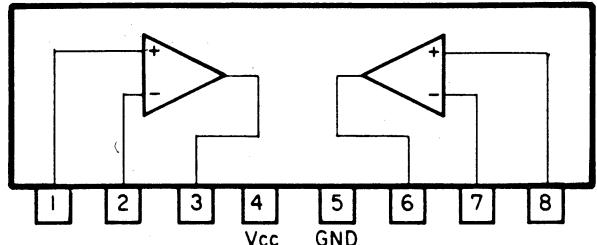
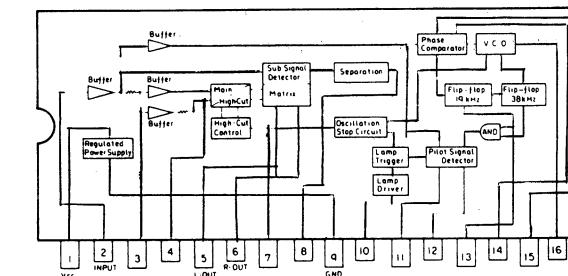
M5215L



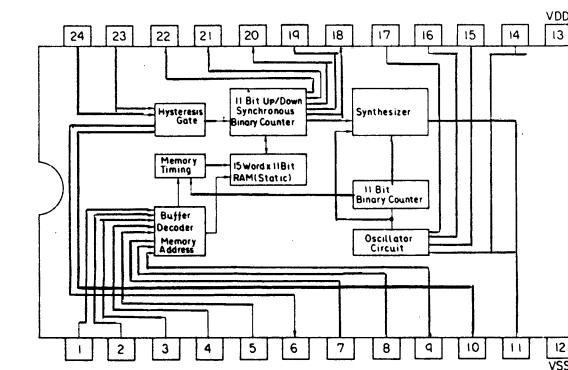
LA1140



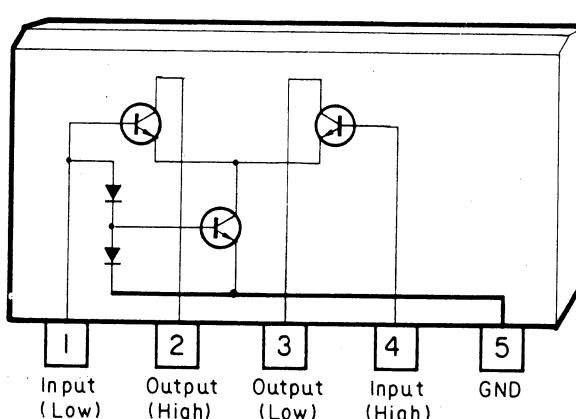
LA3370P



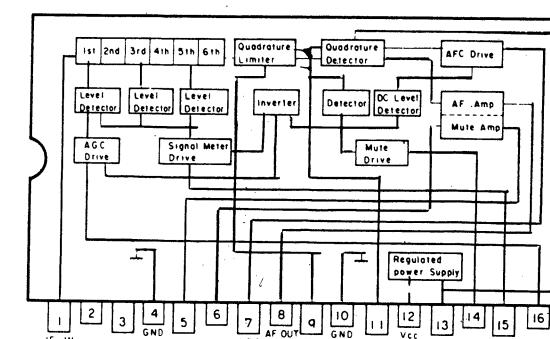
PD4003



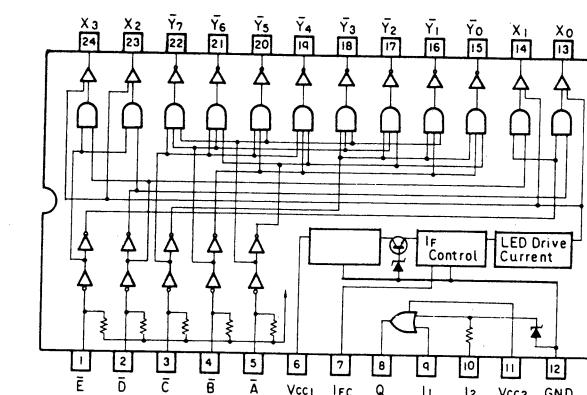
M5215L



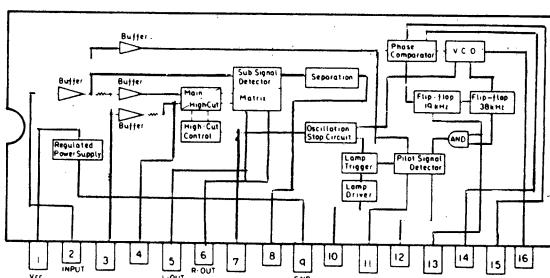
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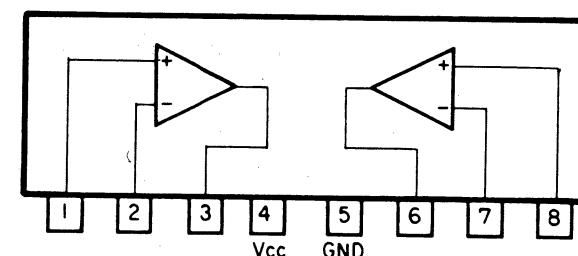
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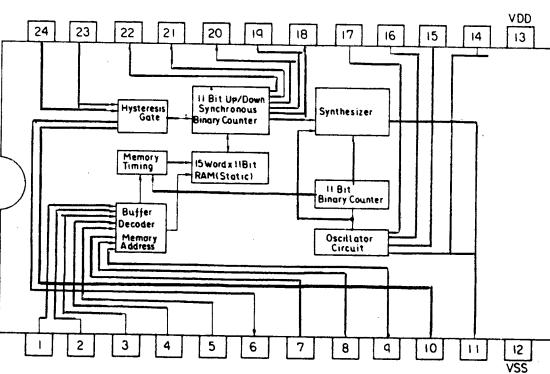
LA3370P



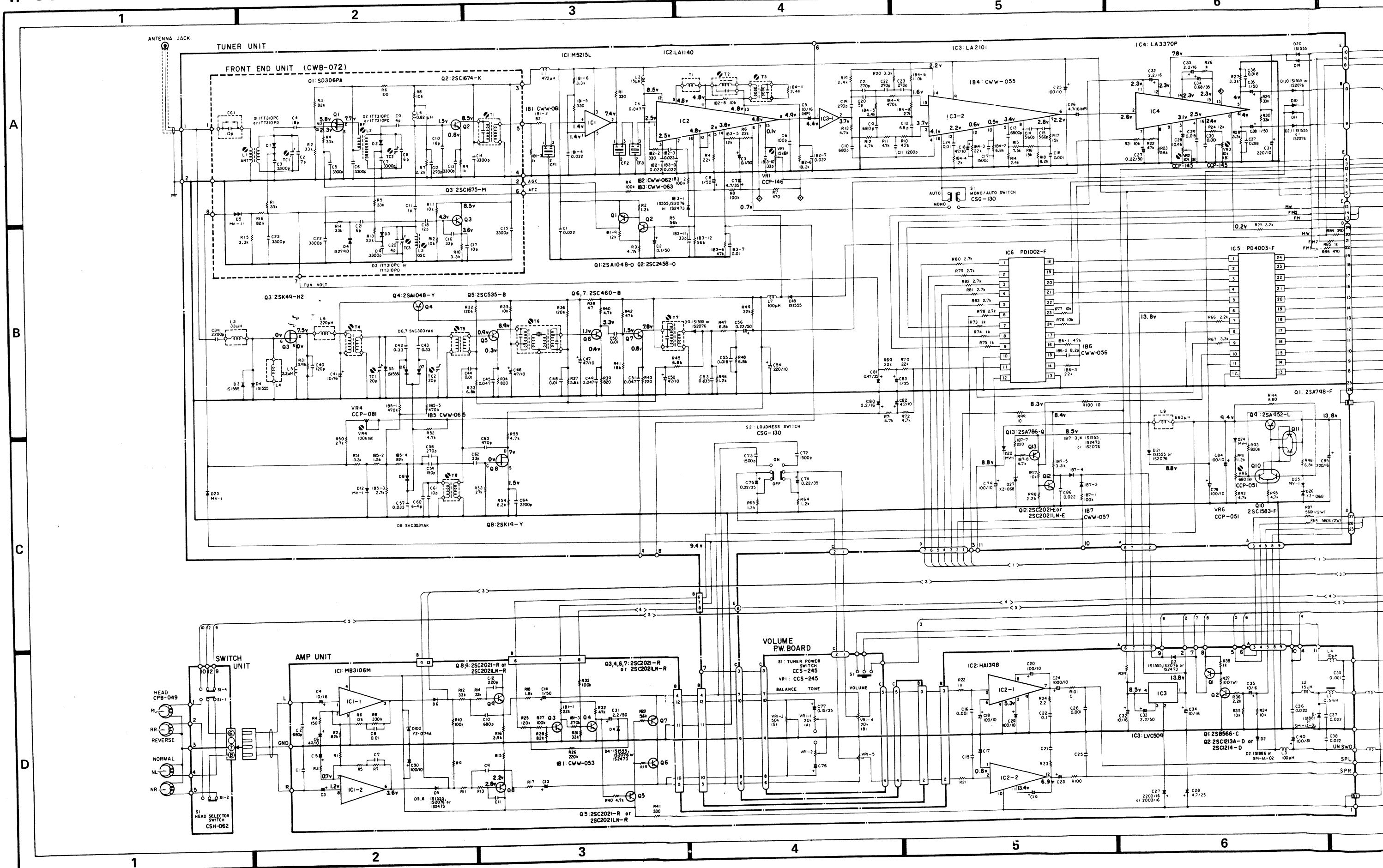
MB3106M

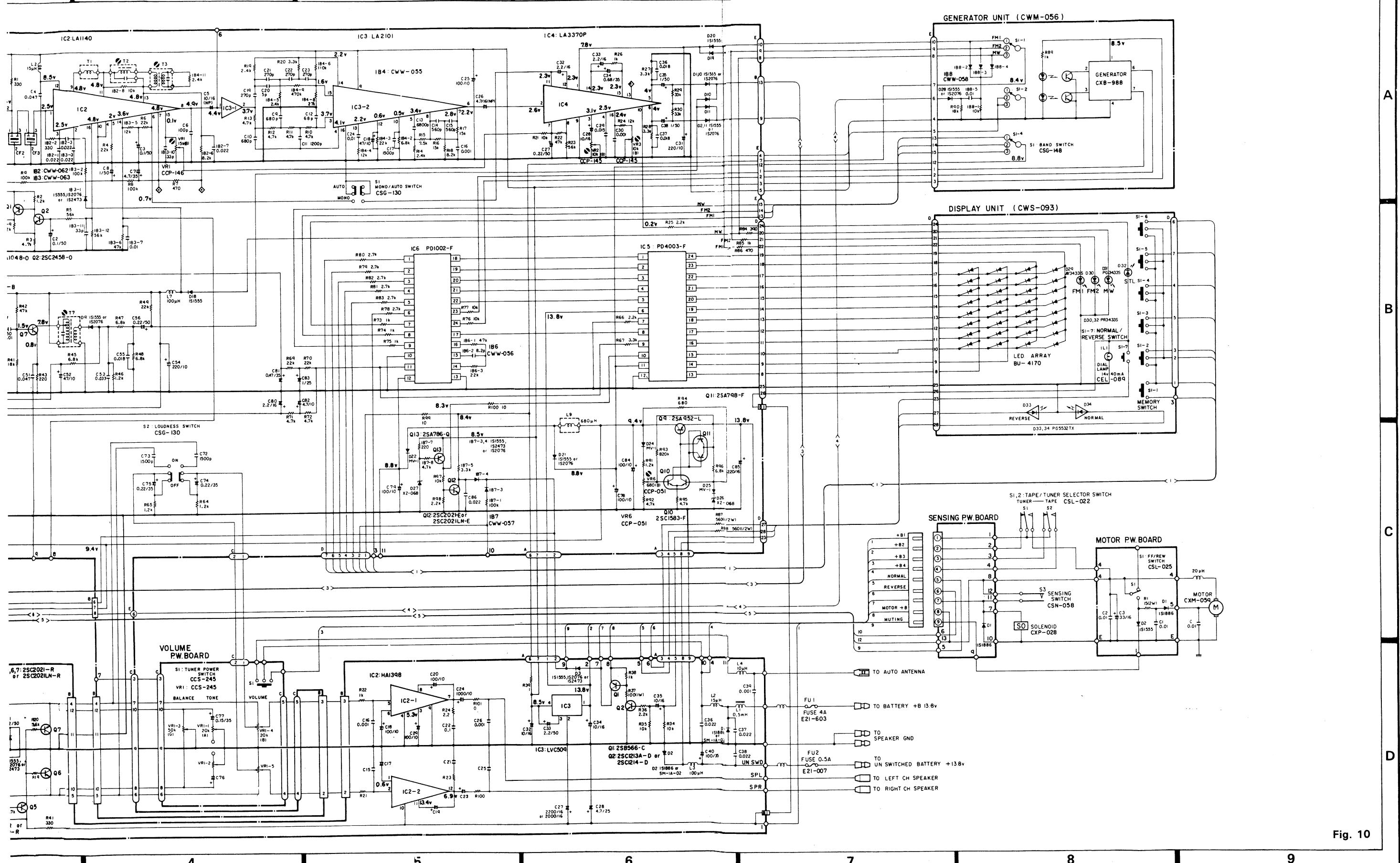


PD4003

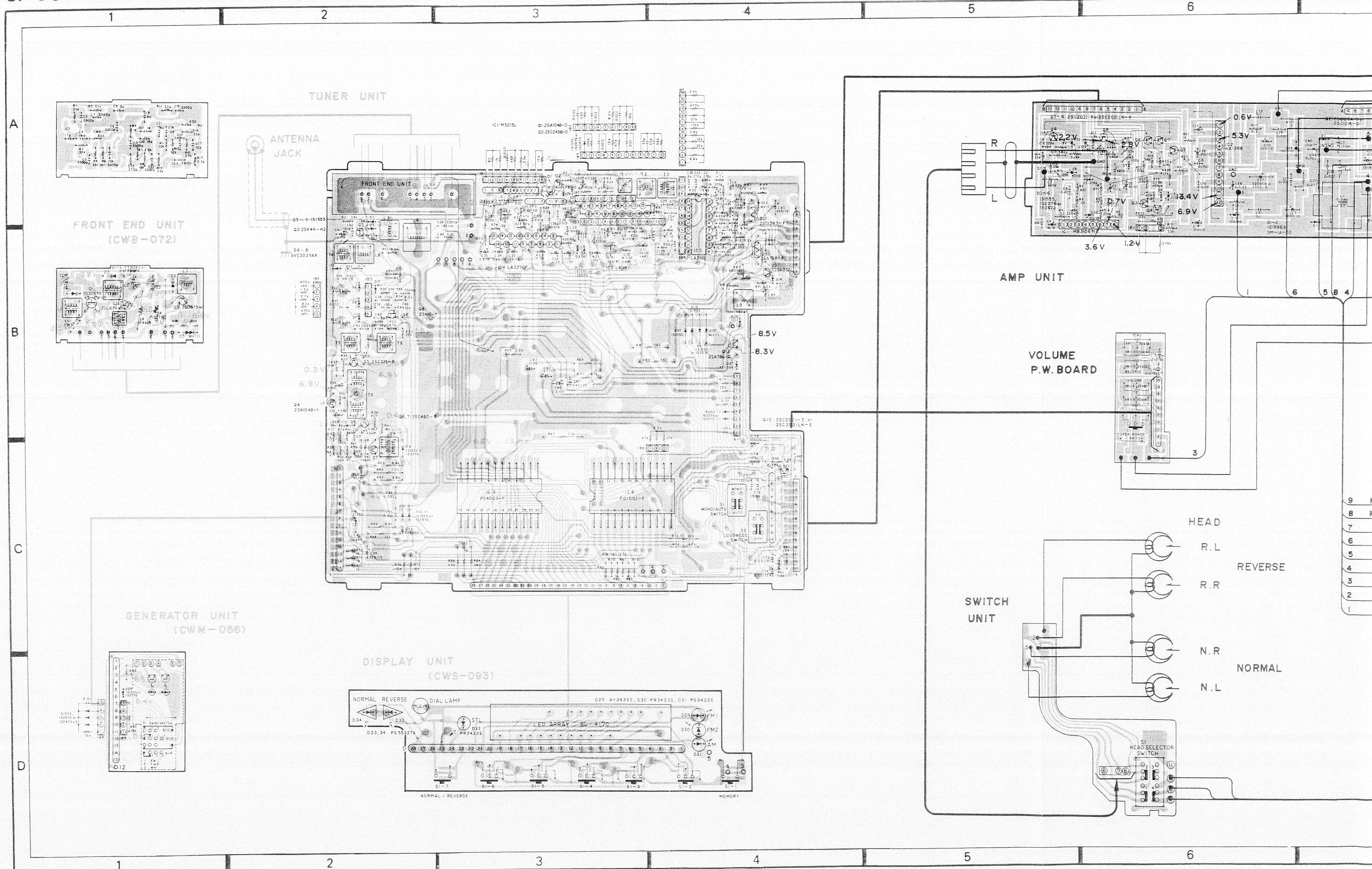


#### 4. SCHEMATIC CIRCUIT DIAGRAM (KE-4000)

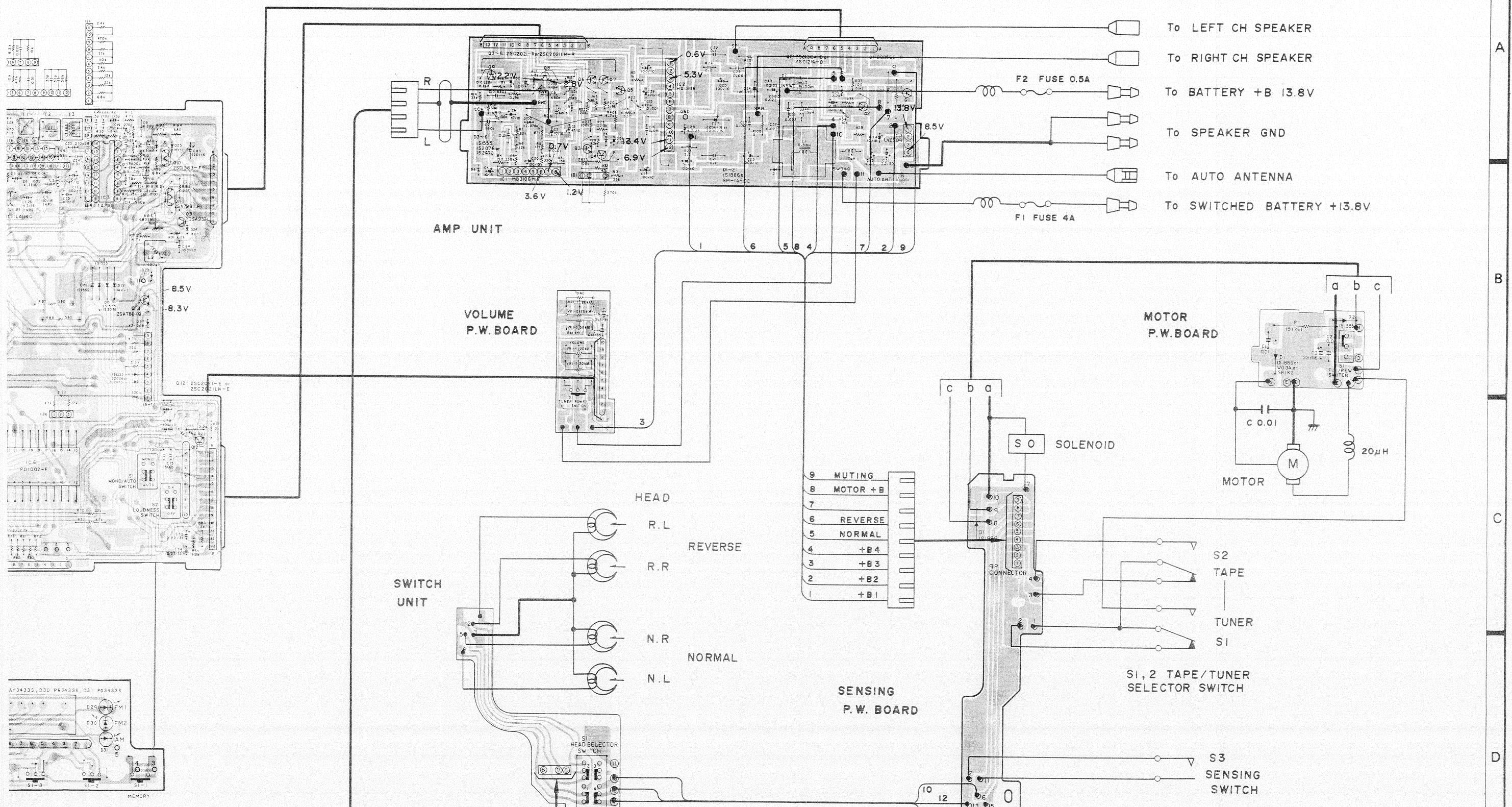




## 5. CONNECTION DIAGRAM (KE-4000)



4 5 6 7 8 9

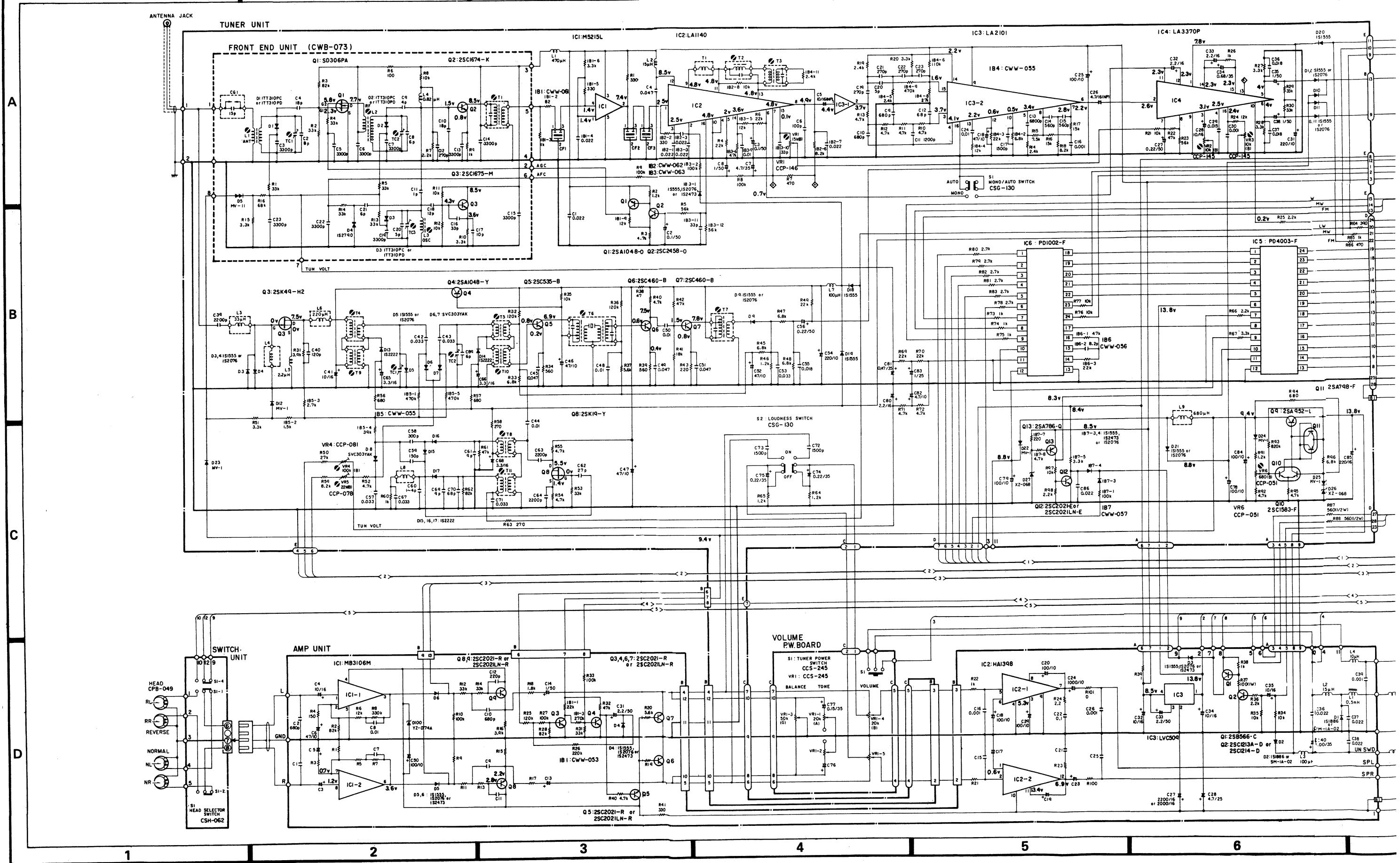


4 5 6 7 8 9

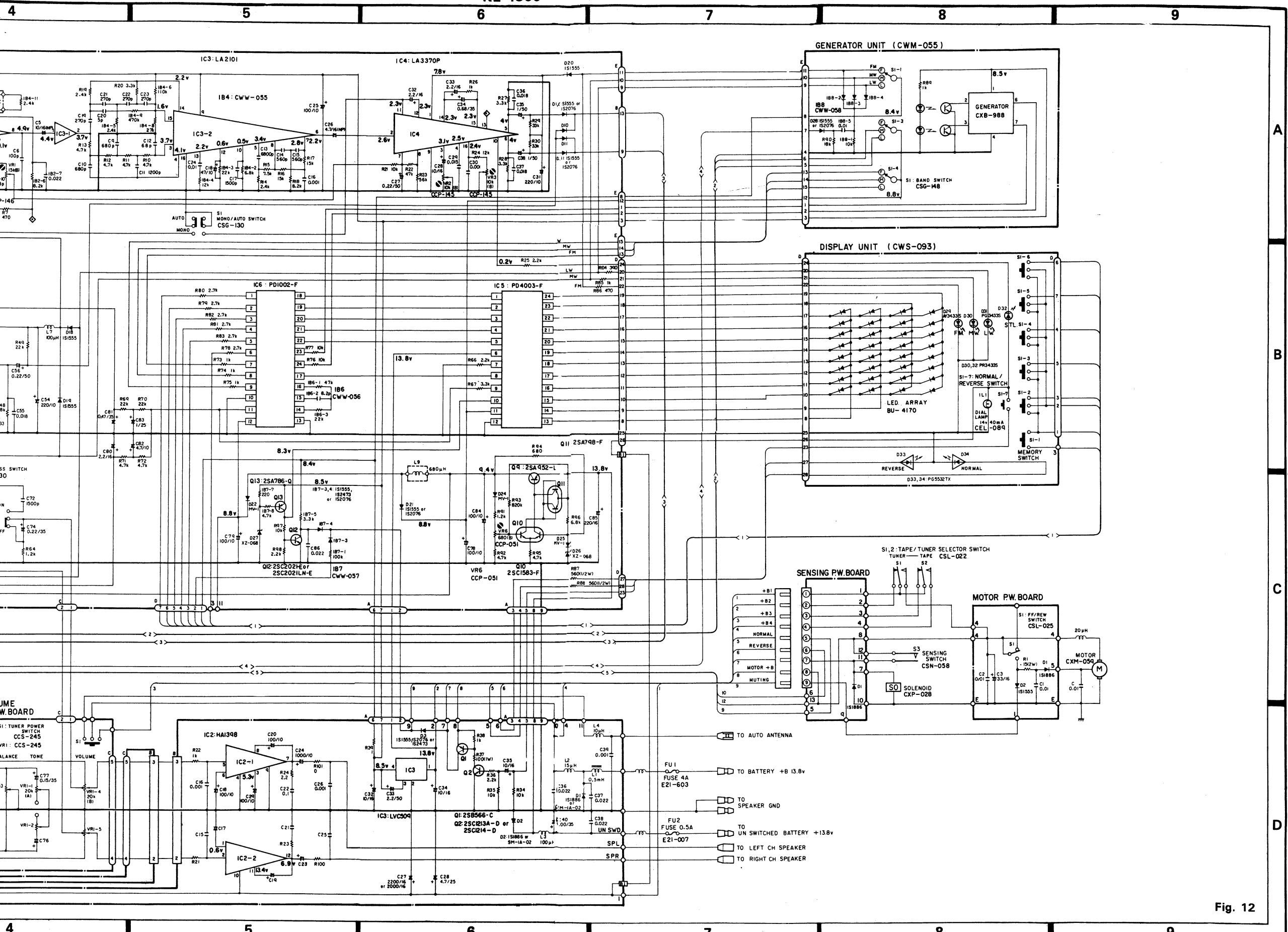
## 6. SCHEMATIC CIRCUIT DIAGRAM (KE-4000 KE-4300)

KE-4000  
KE-4300

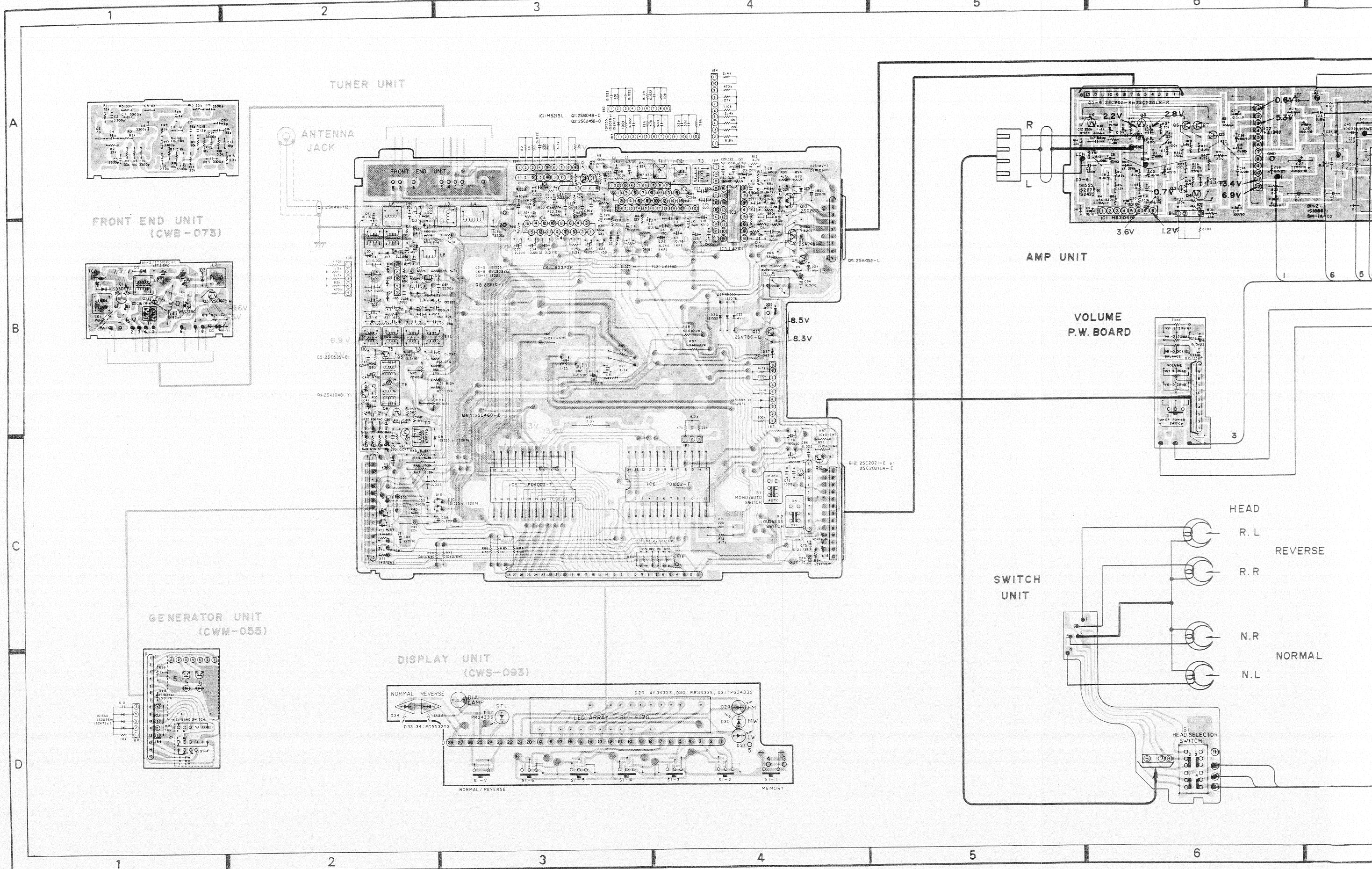
1 2 3 4 5 6



KE-4000  
KE-4300



## 7. CONNECTION DIAGRAM (KE-4300)



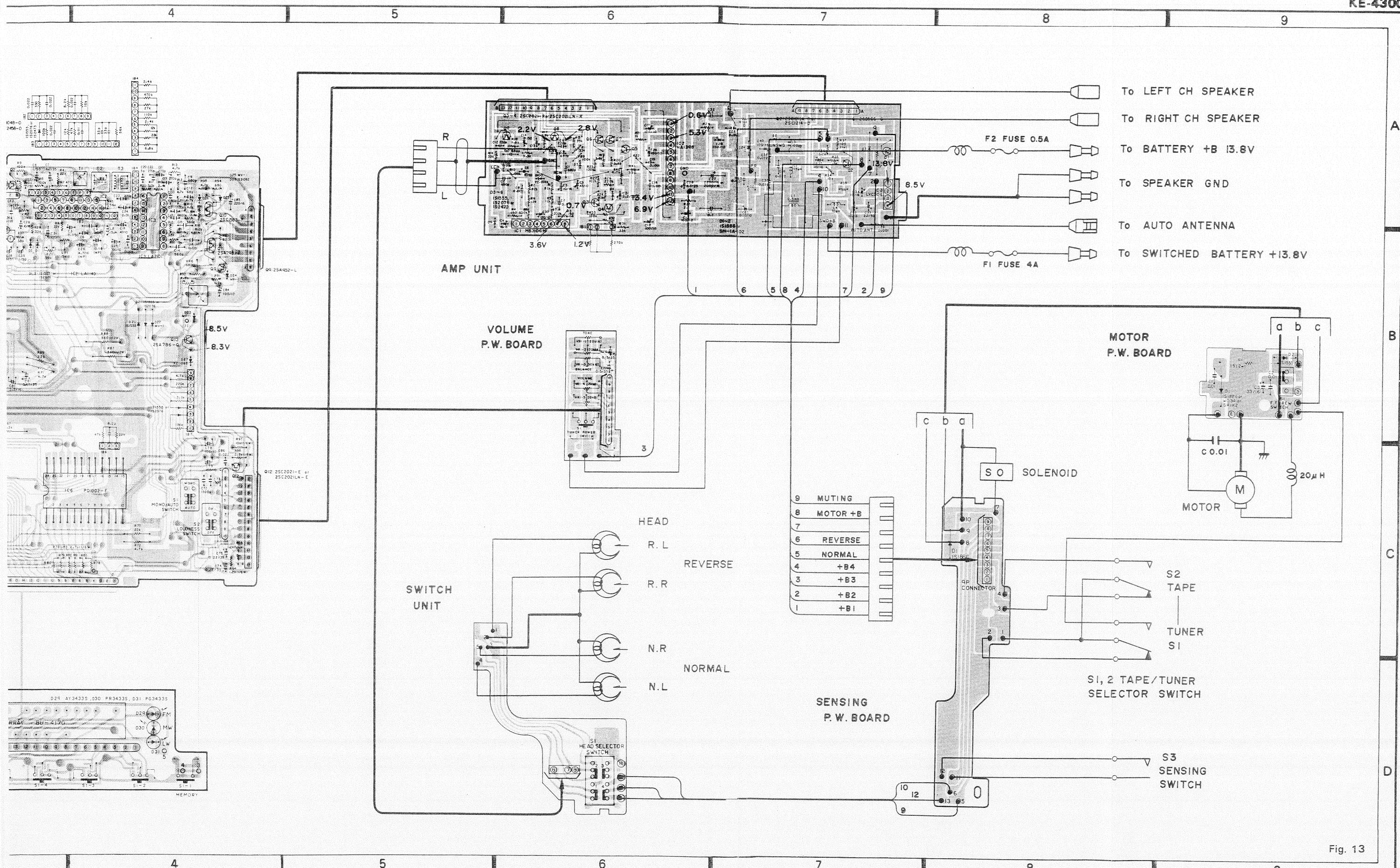
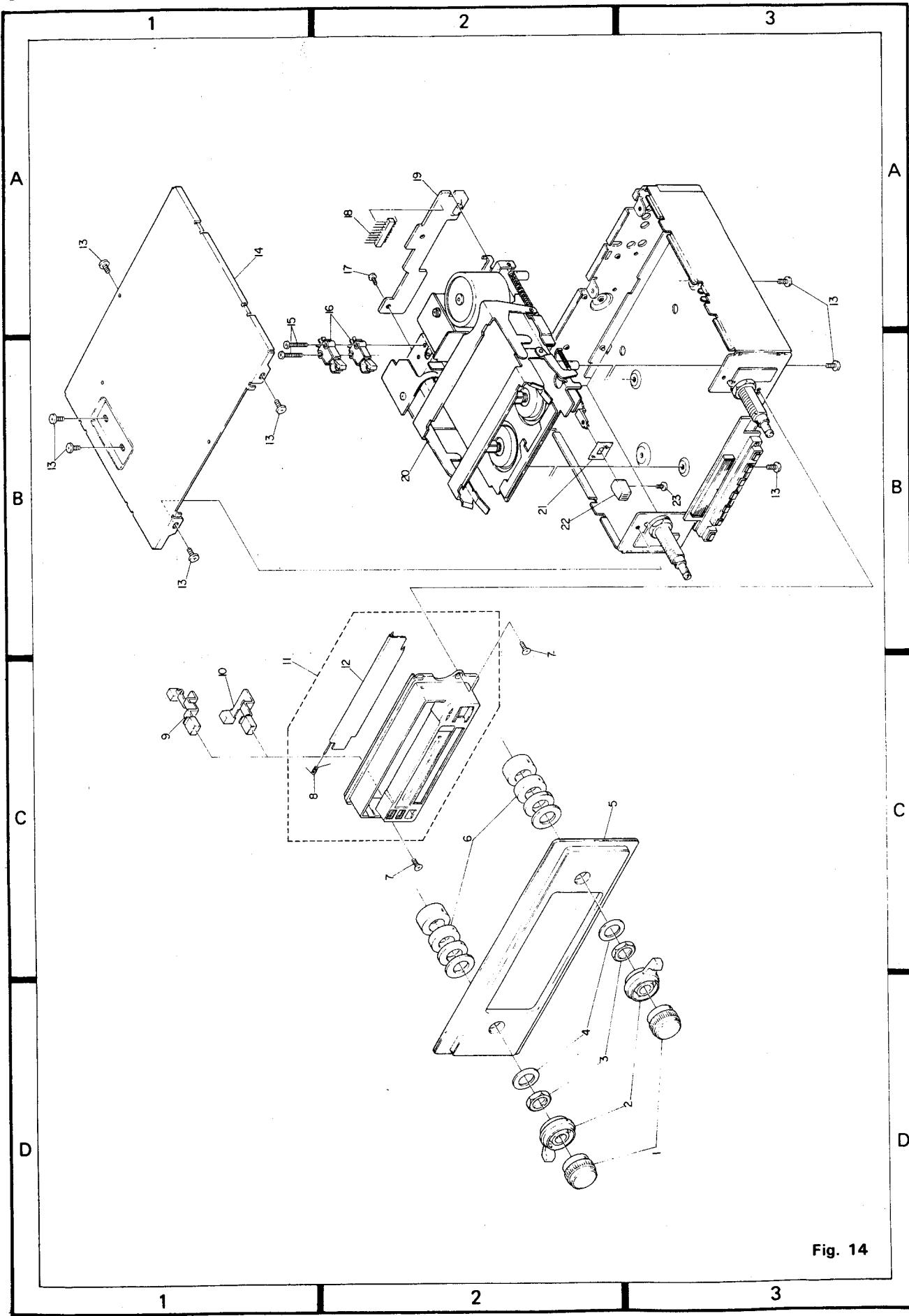
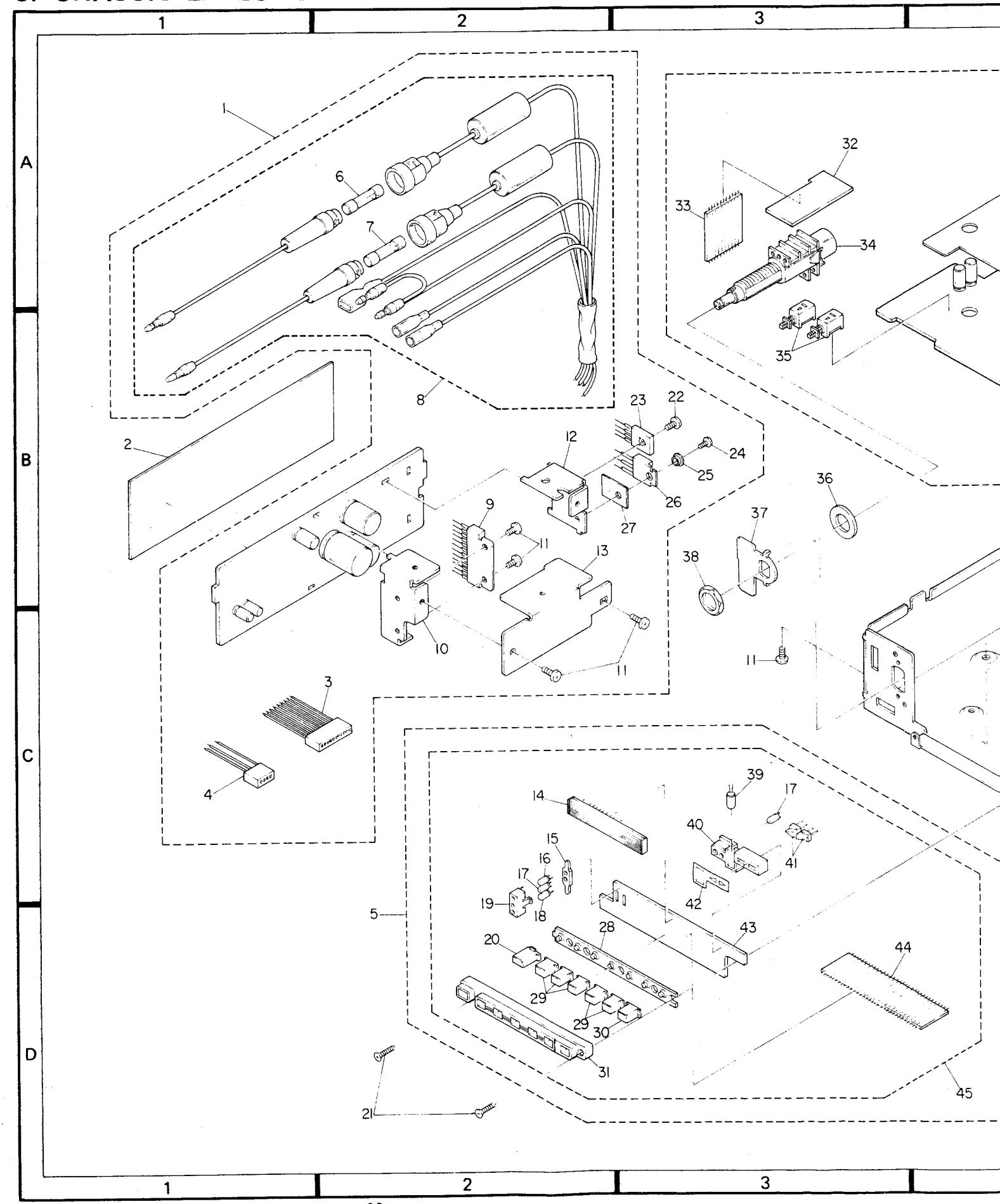


Fig. 13

## 8. CABINET EXPLODED VIEW



## 9. CHASSIS EXPLODED VIEW



## 9. CHASSIS EXPLODED VIEW

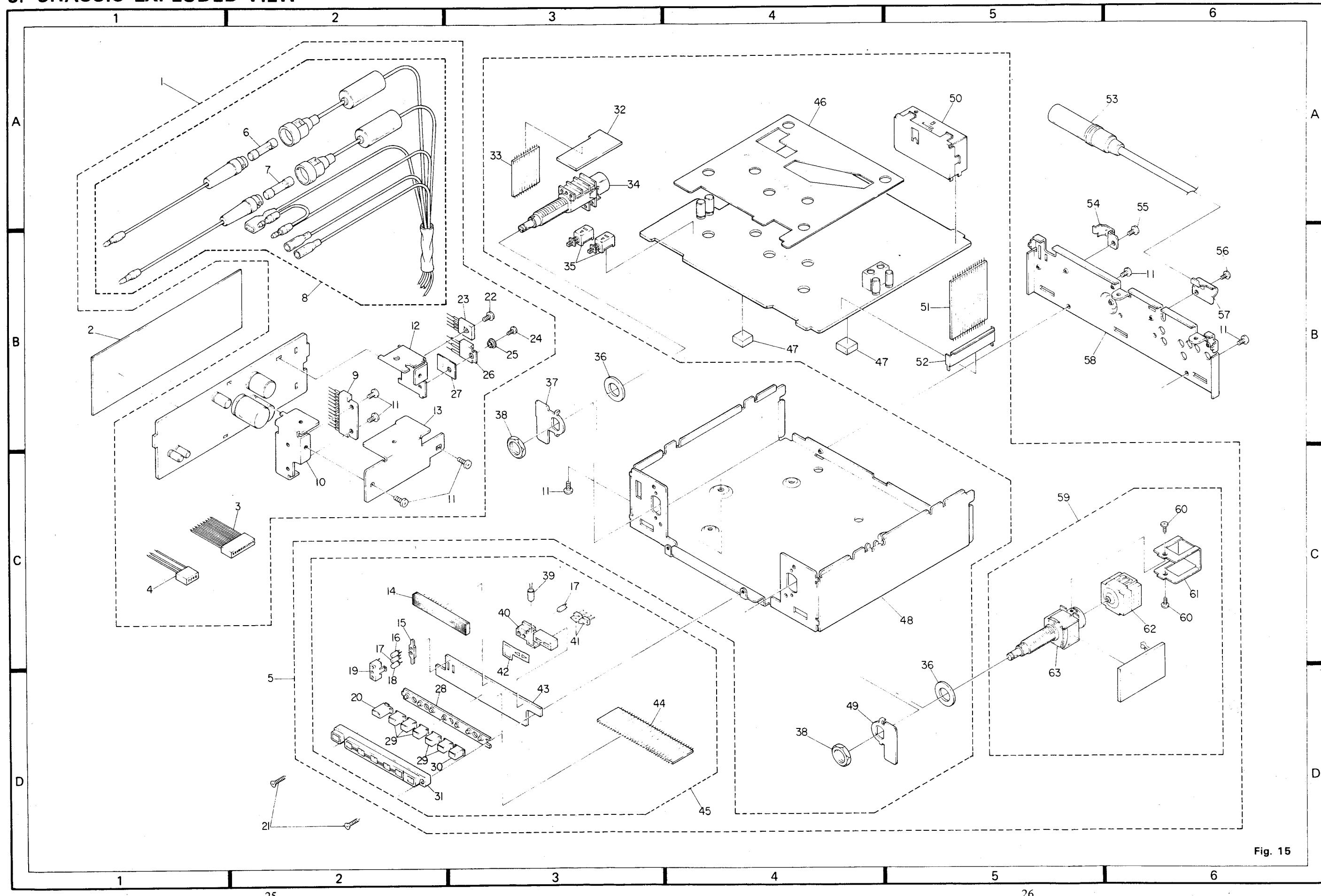


Fig. 15

## 10. PACKING METHOD

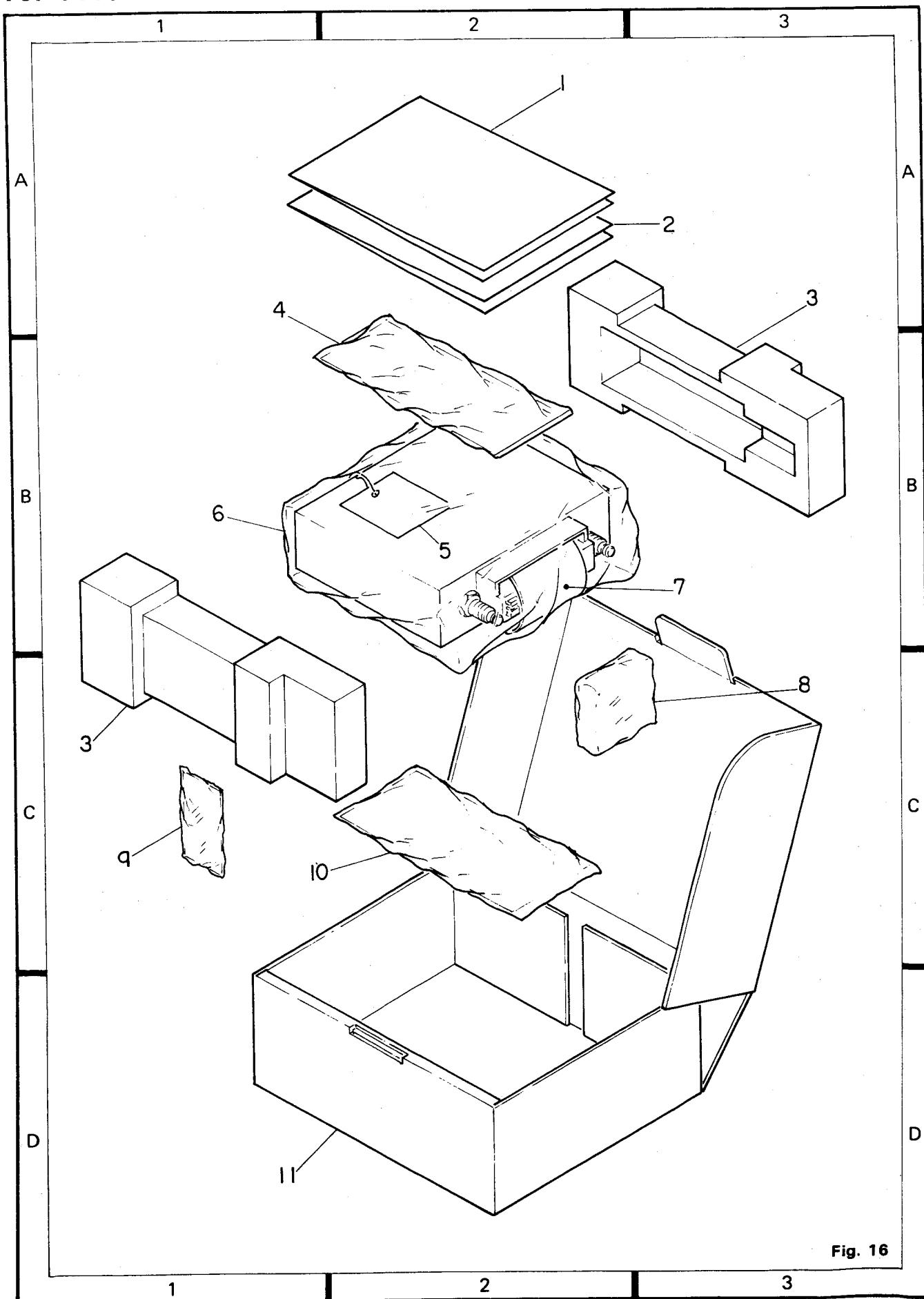


Fig. 16

## 11. PARTS LIST

### NOTE:

When ordering resistors, first convert resistance values into code form as shown in the following examples.

Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

560Ω	$56 \times 10^1$	561.....	RD1/4PS	5 6 1 J
47kΩ	$47 \times 10^3$	473.....	RD1/4PS	4 7 3 J
0.5Ω	0R5 .....	RN2H	0 R 5 K	
1Ω	010.....	RS1P	0 1 0 K	

Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62kΩ	$5.62 \times 10^3$	562.....	RN1/4SR	5 6 2 1 F
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- Parts whose parts numbers are omitted are subject to being not supplied.

### Front End Unit (CWB-072) (KE-4000)

#### MISCELLANEOUS

Part No.	Symbol & Description	
SD306PA	Q1	
2SC1674	Q2	
2SC1675-M	Q3	
ITT310PC or ITT310PD	D1—D3	
1S2790	D4	
MV-11	D5	
CTC-113	L1	Coil
CTC-116	L2	Coil
CTC-114	L3	Coil
CTF-015	L4	Ferri-Inductor, 0.82 μH
CTC-117	T1	IF Transformer
CCL-068	CG1	Capacitor (with discharge gap)
CCG-038	TC1—TC3	Ceramic Trimmer

### RESISTORS

Part No.	Symbol & Description	
RS1/8S□□□J	R1—R15	
CCN-074	R16	82 kΩ

### CAPACITORS

Part No.	Symbol & Description	
VACANT	C1	
CCSSH070D50	C2	
CKSYB332K50	C3, C5—C7, C13—C15, C19, C22, C23	
CCSSH180J50	C4, C10	
CCSSH060C50	C8, C21	
CCSCH040C50	C9	
CCSCH010C50	C11	
CCSCH271J50	C12	
CCSSH330J50	C16	
CCSTH100D50	C17	
CCSTH120J50	C18	
CCSTH040C50	C20	

### Front End Unit (CWB-073) (KE-4300)

#### MISCELLANEOUS

Part No.	Symbol & Description	
SD306PA	Q1	
2SC1674	Q2	
2SC1675-M	Q3	
ITT310PC or ITT310PD	D1—D3	
1S2790	D4	
MV-11	D5	
CTC-113	L1	Coil
CTC-116	L2	Coil
CTC-114	L3	Coil
CTF-015	L4	Ferri-Inductor, 0.82 μH
CTC-117	T1	IF Transformer
CCL-068	CG1	Capacitor (with discharge gap)
CCG-038	TC1—TC3	Ceramic Trimmer

### RESISTORS

Part No.	Symbol & Description	
RS1/8S□□□J	R1—R15	
CCN-073	R16	68 kΩ

### CAPACITORS

Part No.	Symbol & Description	
VACANT	C1	
CCSSH080D50	C2	
CKSYB332K50	C3, C5—C7, C13—C15, C19, C22, C23	
CCSSH180J50	C4, C10	
CCSSH060C50	C8, C21	
CCSCH040C50	C9	
CCSCH010C50	C11	
CCSCH271J50	C12	
CCSSH330J50	C16	
CCSTH100D50	C17	
CCSTH120J50	C18	
CCSTH050C50	C20	

## PARTS LIST

### Generator Unit (CWM-056) (KE-4000) (CWM-055) (KE-4300)

Part No.	Symbol & Description
CXB-988	Generator
1S1555 or	D28
1S2076	
CSG-148	S1
CWW-058	IB8
RD1/4VM□□□J	R89
RD1/4PM□□□J	R90

### Volume P.W. Board

Part No.	Symbol & Description
CCS-245	VR1/S1 Volume/Switch 20 kΩ(A), 50 kΩ(G), 20 kΩ(B)
CSZAR15M35	C76, C77

### Display Unit (CWS-093)

Part No.	Symbol & Description
BU-4170	LED Array
AY3433S	D29
PR3433S	D30, D32
PG3433S	D31
PG5532TX	D33, D34
CEL-089	IL1 Lamp, 14V 40 mA

### Amp Unit

#### MISCELLANEOUS

Part No.	Symbol & Description
MB3106M	IC1
HA1398	IC2
LVC509	IC3
2SB566	Q1
2SC1213A-D or	Q2
2SC1214-D	
2SC2021 or	Q3 - Q9
2SC2021LN	
1S1886 or	D1, D2
SM-1A-02	
1S1555 or	D3 - D6
1S2076 or	
1S2473	
YZ-074A	D100
CTF-002	L1
CTF-003	L2
T24-030	L3
CTH-035	L4
CWW-053	IB1
	Coil, 0.5 mH
	Coil, 15 μH
	Ferri-Inductor, 100 μH
	Coil, 10 μH

### RESISTORS

Part No.	Symbol & Description
RD1/6PS□□□J	R1 - R20, R25 - R28, R32
RD1/4VM□□□J	R21 - R24, R31, R34 - R36, R39 - R41
RD1/4PM□□□J	R33, R38
RS1P□□□K	R37
CCN-056	R100, R101 0Ω

### CAPACITORS

Part No.	Symbol & Description
CKDVB681K50	C1, C2, C9, C10
CEA100M16LL	C3, C4
CEA470M10LL	C5, C6
CQMA103K50	C7, C8
CKDVB221K50L	C11, C12
CEA010M50LL	C13, C14
CKDVB102K50L	C15, C16
CEA101M10L	C17 - C20, C29, C30
CQMA104K50	C21, C22
CCH-046	C23, C24 1000 μF/10V
CQMA102K50	C25, C26, C39
CCH-050	C27 2000 μF/16V or 2200 μF/16V
CSZA4R7M25	C28
CEA2R2M50LL	C31, C33
CEA100M16L	C32, C34, C35
CKDVF223Z50	C36 - C38

### Tuner Unit

#### MISCELLANEOUS

Part No.	Symbol & Description
M5215L	IC1
LA1140	IC2
LA2101	IC3
LA3370P	IC4
PD4003-F	IC5
PD1002-F	IC6
2SA1048	Q1
2SC2458	Q2
2SK49-H2	Q3
2SA1048	Q4
2SC535-B	Q5
2SC460-B	Q6, Q7
2SK19-Y	Q8
2SA952	Q9
2SC1583	Q10
2SA798	Q11
2SC2021 or	Q12
2SC2021LN	
2SA786	Q13
1S1555 or	D1, D2, D9 - D11, D21

## PARTS LIST

Part No.	Symbol & Description	RESISTORS
1S2076		
1S1555	D3—D5, D18—D20	RD1/4VM□□□J
SVC303YAK	*D6—D8	R1—R6, R9—R43, R51—R55, R56—R58 (KE-4300), R60—R63 (KE-4300), R93—R96
MV-1	D12, D22—D25	R7, R8, R45—R49, R67, R84—R86
1S2222	D13—D17 (KE-4300)	R64—R66, R73—R83, R97, R98, R99 (KE-4000), R100 (KE-4000)
VACANT	D13—D17 (KE-4000)	RD1/2PS□□□J
XZ-062	D26	CCN-054
XZ-068	D27	CCN-055
CTH-063	L1	CCN-085
CTF-016	L2	CCN-086
CTB-095	L3	CCN-034
CTB-069	L4	CCN-052
(KE-4300)		VACANT
CTH-049 or	L4	R71, R72
CTH-057	(KE-4000)	R91
CTB-081	L5	R92
CTF-108	L6	R44, R56—R63 (KE-4000), R68, R89, R90
T24-030	L7	
CTB-071	L8	
(KE-4300)		
VACANT	L8 (KE-4000)	CAPACITORS
CTC-094	L9	Part No.
CTC-119	Coil, 680 $\mu$ H	Symbol & Description
CTC-120	T1	CKPVYY223N16
CTC-121	Coil	C1, C86
	T2	CEA0R1M50LL
	Coil	C2, C3
CTB-072	T3	CKDBC473M25
CTB-073	Coil, 210 $\mu$ H	CEA100M16NP
CTE-108	T4	CCPVSL101J50
CTB-075	Coil, 210 $\mu$ H	C5
CTB-080	T5	C6
	IF Transformer	CEA4R7M35LL
	T6	CEA010M50LL
	Coil	CKDSA681J50
CTB-074	T7	CQMA122J50
	Coil, 120 $\mu$ H	CKDSA680J50
	T8	C7
	Coil, 4.7 mH	C8, C35, C38
CTB-077	T9, T10	C9, C10
(KE-4300)	(KE-4000)	C11
CTF-040	T11	C12
	Ceramic Filter	CQMA682J50
CCP-146	CF1—CF3	C13
CCP-145	VR1	CKDSA561J50
CCP-081	VR2, VR3	C14, C15
CCP-078	VR4	C16
(KE-4300)	VR5	CQMA152K50
	Semi-fixed, 15 k $\Omega$ (B)	C17, C72, C73
	Semi-fixed, 10 k $\Omega$ (B)	CEA470M10L
	Semi-fixed, 100 k $\Omega$ (B)	C18, C46, C47
	Semi-fixed, 22 k $\Omega$ (B)	CKDSA271J50
VACANT	(KE-4000)	C19, C21—C23
CCP-051	VR5 (KE-4000)	CCDSL050D50
CCG-030	VR6	C20
CWW-061	TC1, TC2	CQMA103K50
CWW-062	IB1	CEA101M10L
	IB2	C24
CWW-063	IB3	C25, C78, C79, C84
CWW-064	IB4	CEA4R7M16NP
CWW-055	IB5 (KE-4300)	C26
CWW-065	IB5 (KE-4000)	CEAR22M50LL
CWW-056	IB6	C27, C56
CWW-057	IB7	CEA100M16L
CSG-130	S1, S2	C28, C41
	Switch	COMA153K50
		C29
		CQSAH102J50
		C30
		CEA221M10L
		C31, C54
		CSZA2R2M16
		CSZAR68M35
		C32, C33
		C34
		CQMA183J50
		C36, C37
		CKDyb222K50
		C39, C63 (KE-4300), C64
		CKDyb121K50
		C40
		CQMA333K50
		C42, C43, C53, C57, C67 (KE-4300), C71 (KE-4000)
		CKDyD103M50
		C44
		CKDyF103Z50
		C48
		CKDBB103M25
		C50

## PARTS LIST

Part No.	Symbol & Description
CEA470M10LL	C52
CQMA183K50	C55
CCDPH271J50L	C58 (KE-4000)
CCDPH301J50L	C58 (KE-4300)
CCDPH151J50L	C59
CCDCH010D50 or *C60 (KE-4300)	
CCDCH020D50 or	
CCDCH030D50 or	
CCDCH040D50	
CCDCH060D50 or *C60 (KE-4000)	
CCDCH070D50 or	
CCDCH080D50 or	
CCDCH090D50	
CCDXK090D50	C61 (KE-4300)
CCDWK100F50	C61 (KE-4000)
CCDXK270J50	C62 (KE-4300)
CCDVK330J50	C62 (KE-4000)
CKDYB471K50	C63 (KE-4000)
CSZAH3R3M16	C65 (KE-4300), C66 (KE-4300), C68 (KE-4300)
CCDPH090D50	C69 (KE-4300)
CCDPH680J50	C70 (KE-4300)
VACANT	C65—C71 (KE-4000)
CSZAR22M35	C74, C75
VACANT	C76, C77
CSZA2R2M16	C80
CSZAR47M35	C81
CSZA4R7M10	C82
CSZA01M25	C83
CEA221M16L	C85
VACANT	C87
CKDYF103Z50L	C88 (KE-4000)
VACANT	C88 (KE-4300)
CCDCH060D50	C89 (KE-4300)

### Caution:

Diodes \*D6-D8 and capacitor \*C60 used mutually in the following assembly.

### KE-4000

D6-D8	C60
SVC303YAK-25	CCDCH060D50
SVC303YAK-24	CCDCH070D50
SVC303YAK-23	CCDCH080D50
SVC303YAK-22	CCDCH090D50

### KE-4300

D6-D8
SVC303YAK-25
SVC303YAK-24
SVC303YAK-23
SVC303YAK-22

C60
CCDCH010D50
CCDCH020D50
CCDCH030D50
CCDCH040D50

### Motor P.W. Board

Part No.	Symbol & Description
1S1886 or W03A or SR1K2	D1
1S1555	D2
CKDYF103Z25	C1, C2
CEA330P16	C3
RS2P□□□J	R1
CSL-025	S1
	Switch

### Switch Unit

Part No.	Symbol & Description
CSH-062	S1
	Switch

### Sensing P.W. Board

Part No.	Symbol & Description
1S1886	D1

### Miscellaneous Parts List

Part No.	Symbol & Description
CSL-022	S1, S2
CSN-058	S3
E21-603	FU1
E21-007	FU2
CXM-059	M
CPB-049	HD
CXP-028	SO
	Head
	Solenoid

## PARTS LIST

### Cabinet

Key No.	Part No.	Description	Key No.	Part No.	Description
1.	CAA-325	Knob	25.	B21-679	Insulating Bushing
2.	CAA-322	Knob	26.	2SB566	Transistor
3.	CBN-016	N10 $\phi$ x 3t	27.	CNM-030	Insulating Plate
4.	CND-646	FW10 $\phi$ x 1t	28.	CNW-141	Rubber
5.	CEA-404	Panel (KE-4000)	29.		Button
	CEA-403	Panel (KE-4300)	30.		Button
6.	CNV-769	Washer	31.		Housing
7.	CMZ26P060FMC	Screw	32.		P.W. Board
8.	CBH-543	Spring	33.	CDE-764	Connector
9.	CXC-099	Button Unit	34.	CCS-245	Volume/Switch
10.	CXC-098	Button Unit	35.	CSG-130	Switch
11.	CXC-090	Grille Assy (KE-4000)	36.	CBE-084	Spacer
	CXC-091	Grille Assy (KE-4300)	37.		Holder
12.	CAT-097	Door	38.	CBN-028	Nut
13.	BMZ30P040FMC	Screw	39.	CEL-089	Lamp, 14V 40 mA
14.	CXC-101	Case Unit	40.		Holder
15.	BMZ20P140FMC	Screw	41.	PG5532TX	LED
16.	CSL-022	Switch	42.		Spacer
17.	BMZ26P040FMC	Screw	43.		P.W. Board
18.	CKS-089	Plug	44.	CDE-762	Connector
19.		Sensing Unit	45.	CWS-093	Display Unit
20.		Cassette Mechanism Unit	46.		Insulator
21.		Spacer	47.	CNW-078	Spacer
22.	CAC-324	Button	48.	CNA-167	Chassis
23.	BMZ26P030FUC	Screw	49.		Holder

### Chassis

Key No.	Part No.	Description	Key No.	Part No.	Description
1.	CWK-231	Amp Assy	54.	CNE-482	Clamper
2.		Insulator	55.	BMZ30P060FMC	Screw
3.	CDE-766	Connector	56.	BMZ26P060FMC	Screw
4.	CDE-765	Connector	57.	CNE-855	Clamper
5.	CNE-368	Tuner Assy (KE-4000)	58.		Sub Chassis
	CNE-367	Tuner Assy (KE-4300)	59.	CWM-056	Generator Unit (KE-4000)
6.	E21-603	Fuse, 4A		CWM-055	Generator Unit (KE-4300)
7.	E21-007	Fuse, 0.5A	60.	PMZ20P030FMC	Screw
8.	CDE-767	Cord	61.		Holder
9.	HA1398	IC	62.	CXB-988	Generator
10.		Heat Sink	63.	CSG-148	Switch
11.	BMZ30P040FMC	Screw			
12.		Heat Sink			
13.		Shield			
14.	BU-4170	LED Array			
15.	CNM-639	Spacer			
16.	AY3433S	LED			
17.	PR3433S	LED			
18.	PG3433S	LED			
19.	CNW-138	Holder			
20.		Button			
21.	CMZ20P090FUC	Screw			
22.	BMZ30P050FMC	Screw			
23.	LVC509	IC			
24.	BMZ26P050FMC	Screw			

## PARTS LIST

### Packing Method

Key No.	Part No.	Description
1.	CRD-131	Owner's Manual (KE-4300) (English/French/German/Spanish)
	CRD-135	Owner's Manual (KE-4000) (English/French/German/Spanish)
2.	CRD-132	Owner's Manual (KE-4300) (Swedish/Norwegian/Dutch/Italian)
	CRD-134	Owner's Manual (KE-4000) (Swedish/Norwegian/Dutch/Italian)
3.	CHB-922	Styrofoam (1 set pair)
4.	CEA-403	Panel (KE-4300)
	CEA-404	Panel (KE-4000)
5.		Tag
6.	E36-622	Polyethylene Bag
7.		Label
8.	CEA-402	Knob Kit
8-1.	CAA-322	Knob
8-2.	CAA-325	Knob
9.	CEA-253	Holder Kit
9-1.	BMZ40P060FMC	Screw
9-2.	WHXOFMC	Washer
10.	CEA-300	Accessory Kit
10-1.	CNC-975	Strap
10-2.	CDE-437	Cord
10-3.	CNV-769	Washer
10-4.	CEA-215	Screw Kit
10-4-1.	CBA-028	Screw for Strap
10-4-2.	B70-055-A	WN4 $\phi$ × 4.5t
10-4-3.	WS40FMC	Washer
10-4-4.	PMB50P200FMC	Screw
10-4-5.	B70-056-A	WN5 $\phi$ × 5.3t
10-4-6.	CND-646	FW10 $\phi$ × 1t
10-4-7.	CBN-016	N10 $\phi$ × 3t
11.	CHB-895	Carton (KE-4300)
	CHB-897	Carton (KE-4000)